

Massachusetts Urban & Community Forestry Program

The Citizen Forester

101st Annual Massachusetts Tree Wardens' and Foresters' Association Conference

FEBRUARY 2014

By **Rick Harper** and **Mollie Freilicher** On Tuesday, January 14, and Wednesday, January 15, the Massachusetts Tree Wardens' and Foresters' Association (MTWFA) hosted nearly 300 attendees and 30 exhibitors at the Sturbridge Host Hotel in Sturbridge. The two-day event featured a trade show floor filled with exhibitors displaying equipment, technology, and literature for sale and give-away, and a roster of internationally-renowned speakers. In addition to informative lectures and an annual business meeting, the conference featured door prizes, networking, and a lunchtime awards ceremony that featured the presentation of the 2014 George E. Stone Award to Eric Seaborn. The Stone Award is the highest award bestowed by this organization, exemplifying a member who has continuously demonstrated outstanding dedication, with many hours of volunteer service to the organization and to the furtherance of the urban forestry profession. Congratulations, Eric! The Association also honored Melissa LeVangie with the President's Award for her service to the Association and the industry, and named John Lavin of North Andover the Tree Warden of the Year.

the roster of speakers. From the Department of Environmental Conservation, Dr. Bethany Bradley presented a lecture on the impact of climate change on urban forests, and Rick Harper provided a UMass Urban Forestry program update. Dr. Nick Brazee, UMass Extension Pathologist and Plant Diagnostic Director, provided an update on woody plant diseases of importance. According to Dr. Brazee, 2013 was a banner year for disease, as a result of the excessive amounts of rainfall in the early portion of the growing season.

The keynote speaker for this year's conference was Dr. Nina Bassuk, Professor and Director of Cornell University's Urban Horticulture Institute (UHI). Dr. Bassuk provided a wealth of information about creating spaces for trees in the urban environment and tips for selecting hardy trees in the urban environment. She also highlighted some of her recent research that has received international acclaim, including her work on propagating oak (*Quercus* spp.) specimens selected for optimal growth performance in the harsh urban environment. Andrew Hillman from the Davey Resource Group discussed underused and unusual trees that may be planted in an effort to diversify the tree populations of our urban environment, which are notoriously homogeneous. Mr. Hillman pointed out that while many of the trees he presented, such as persimmon (*Diospyros virginiana*), parrotia (*Parrotia persica*), Amur maackia (*Maackia amurensis*), and hophornbeam (*Ostrya virginiana*) are not plentiful in the nursery trade, we should start to demand them more so that in the future, they will be more available.



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Kicking off the educational program, speakers on the first day provided updates from state specialists at the Massachusetts Department of Conservation and Recreation. Mollie Freilicher, Julie Coop, and Ken Gooch discussed topics ranging from community reforestation initiatives to urban forest health activities, including the latest on the Asian Longhorned Beetle (ALB) and Emerald Ash Borer (EAB) – two invasive insects present in Massachusetts and known to devastate trees.

Faculty from the University of Massachusetts were well-represented on

(Continued on page 2)

Mass Tree Wardens' Annual Conference

The second day of the conference began with an eye-opening presentation on electrical safety with Maurice (Zeke) Dumas of Western Massachusetts Electric Co. (a division of Northeast Utilities). Mr. Dumas started at the very beginning, with the atom, and moved on from there to explain electrical transmission and electrical hazards, including examples of injuries and emphasizing the importance of recognizing and avoiding hazards. Dr. David Bloniarz of ReGreen Springfield and Alex Sherman, Assistant City Arborist of Springfield, presented the story of ReGreen Springfield and the partnerships that the organization has established to work toward the regreening of the city following a tornado in 2011. Dr. Richard Cowles from the Connecticut Agricultural Experiment Station ended the day with management strategies for Emerald Ash Borer (EAB) and encouraged community tree managers to carefully consider the "big picture" benefits of keeping their populations of ash trees (*Fraxinus* spp.) and managing for EAB, as opposed to the wholesale removal of their ash trees as soon as EAB turns up. Dr. Cowles outlined cost estimates for treatment versus removal and the monetary and environ-

mental benefits that large trees provide.

For further information about the conference and to see some of the presentations that were delivered, visit the Massachusetts Tree Wardens' and Foresters' Association website at: www.masstreewardens.org. Congratulations to the MTWFA on the completion of yet another successful annual conference - 101 years and still growing strong!

Rick Harper serves as Extension Assistant Professor of Urban & Community Forestry, UMass Department of Environmental Conservation, Amherst, and is also an ISA Board-Certified Master Arborist. **Mollie Freilicher** is the Community Action Forester for the Massachusetts Department of Conservation and Recreation.

2014 Massachusetts Arbor Day Poster Contest

TREES ARE TERRIFIC AND GOOD FOR OUR HEALTH!

Each year, over 1,500 Massachusetts fifth graders participate in the Arbor Day Poster Contest. The winners reap rewards, including art supplies, ice cream, and a tree for their school. Each year there is a theme, such as "Trees are Terrific...from acorn to oak!" (2003) or "Trees are Terrific....In Cities and Towns!" (2009), selected to encourage students to think about trees in new ways.

The 2014 theme, ***Trees are Terrific and Good for Our Health!*** is designed to increase students' understanding of trees, the role trees play in their community, and the impact of trees on health and well-being.

The deadline for this year's entries is April 18, 2014. Submit one entry per school.

Download – [Poster Contest Rules and Information Packet](#) 

For more information, contact Mollie Freilicher 413-577-2966 or mollie.freilicher@state.ma.us.

Species Spotlight—Hoptree, *Ptelea trifoliata*

By **Mollie Freilicher**
MA-DCR
Community Action Forester



Hoptree is a tree or small shrub of the Rue family that is native from southern Ontario to western New York, south to Florida, west to Texas, and north to southern Wisconsin, where it grows on dry uplands, moist woodlands, and woodland edges. It is also known as “wafer ash” and “stinking

ash.” The common name “wafer” refers to the fruit and “stinking” refers to the unpleasant odor that the leaves and twigs release when broken. Hoptree grows to 20 feet tall, with a similar spread, and will do well in USDA Hardiness Zones three through nine. It often has a spreading form and will sucker.

The leaves of hoptree are alternate, glossy dark green above, and glabrous on the underside. The leaves are made of three leaflets (hence “trifoliata”) that are ovate with a pointed tip. The side leaflets are narrower and more elliptical than the middle leaflet, which is a bit more obovate. The margins can be crenate or entire. With a hand lens, gland dots may be visible, and the leaves let out a lemon-like pungent odor when crushed. On a quick glance, young leaves can resemble poison ivy, but do not have the irregular shape that some poison ivy leaflets exhibit. You can also note the different growing habits between hoptree and poison ivy—poison ivy is a vine and hoptree



is a tree or shrub. Fall color on hoptree is yellow or yellow-green.

Twigs are reddish-brown, rounded, slender, and a bit warty. The leaf scars are

horseshoe-shaped with three bundle traces, with buds set inside the U. When bruised, the twigs will let off a pungent odor. The bark is dark gray and smooth to scaly.

Appearing in clusters in late spring, the flowers are fragrant but not showy, and are a half-inch-long, with greenish-white petals. The fruit is a winged, two-sided, compressed indehiscent samara that looks like a disc or wafer. Historically, it



was reportedly used a substitute for hops, giving the tree the common name “hoptree.” The genus *Ptelea* is the Greek name for elm, because the fruit of hoptree resembles the fruit of the elm. A 1936 bulletin of the Arnold Arboretum listed hoptree as a tree to utilize because of its ornamental fruit, although the Arboretum did not note it to be “of outstanding value.” Every garden

needs its supporting actors, though, and hoptree can certainly fill that role. Hoptree is often overlooked, but can add something to the landscape, both in the shrub and small tree form.

Hoptree is free of major disease and insect pests and is adaptable to various site conditions. It does best in well-drained soils and will tolerate both sun and shade, making a good addition to shrub beds or plantings at wooded edges. ‘Aurea’ is a well-known cultivar, with leaves that are yellow when young and turn a lime-green through the summer.

Photos: Twig, bark: Virginia Tech; Flower and fruit: UConn; Leaf and form: Wikipedia



Growing on Trees

Mass. Tree Wardens' and Foresters' Association Awards

Congratulations, Eric Seaborn!!!

At the 101st Annual Tree Wardens and Foresters Association Conference, the association presented Eric (our former Program Coordinator) with the prestigious George E. Stone Award for his contribution to the association over the last ten years. The George E. Stone Award is the highest honor the MTWFA bestows and recognizes an individual who has shown a strong commitment and dedication to the association. Unlike the annual President's Award (which Eric was awarded in 2013), the George E. Stone Award is not necessarily awarded every year. Congratulations, Eric!

The President's Award

Congratulations to **Melissa LeVangie**, the 2014 recipient of the President's Award. The President's Award recognizes an individual who has contributed to the association or the industry or who has been a mentor of the current president of the association. Melissa has over 15 years experience in the industry and is currently a USDA Climbing Inspector for the Asian Longhorned Beetle Eradication Program in Worcester. She is a past president of the association and is dedicated to the field. (If you attended our Tree Steward Training this past October, you got to enjoy Melissa's presentation on pruning and experience her dedication to the field.) Congratulations, Melissa!

Tree Warden of the Year

Congratulations to **John Lavin** of North Andover on being named Tree Warden of the Year 2014. Lavin has been with the town for many years, and in addition to facing the daily challenges that Tree Wardens across Massachusetts encounter, this year Lavin will be coping with emerald ash borer, which was detected in North Andover last fall. Congratulations, John!

We do our best to ensure that listings are accurate, but please check with program organizers for the most up-to-date information.

UMass Community Tree Conference

Sustaining the Trees that Sustain Our Communities

Tuesday, March 11, 2014, 9:00 a.m. to 4:00 p.m.
Stockbridge Hall, UMass Amherst
<http://extension.umass.edu/landscape/>

This one-day conference is designed for arborists, tree wardens, municipal managers, city planners, foresters, sugar bush owners, and landscape architects who are involved with the management of property, both private and public. The University of Massachusetts Extension, the Massachusetts Department of Conservation and Recreation, and the USDA Forest Service sponsor this annual conference.

Topics include:

- *The Benefits of Trees - David Bloniarz, Ph.D., UNRI, USDA Forest Service
- *Greening Amherst: An Update on Urban Forest Management Practices and Policies, Alan Snow, Tree Warden Town of Amherst, MA
- * Establishing Trees: The Early Years - David Lefcourt, City Arborist, City of Cambridge, MA
- * Maximizing Benefits: Selling the Care of Mature Trees - Mike Lueders, President, Lueders Environmental
- * Pesticide Safety: Storage, Handling & Use - Patrick Parker, Plant Health Care Program Director, SavATree
- * Asian Longhorned Beetle: A Climber's Perspective - Melissa LeVangie, USDA ALB Program

I 1/2 PESTICIDE CONTACT HOURS AVAILABLE for Applicator's License, categories 36 and 40.

Association credits available: 5 1/2 ISA, 5 CFE's, and 1 MCH. MCA, MCLP, SAF, and AOLCP credit pending.

For a registration form or to register online using a credit card, go to <http://extension.umass.edu/landscape/>

Cost is \$65/person for first registration, \$40/person for each additional registration from the same company. Coffee break and parking pass included in registration fee. (Lunch is on your own).

For more information, contact UMass Extension at (413) 545-0895, eweeks@umext.umass.edu, or Dennis Ryan at (413) 545-6626, dr@eco.umass.edu

Growing on Trees

The 2014 Version Of i-Tree is Now Available

The 2014 release of the i-Tree Tools greatly expands the capabilities of two of the most widely used applications: i-Tree Design and i-Tree Canopy. In addition, i-Tree Hydro has many new features. Here are a few highlights:

i-Tree Design

i-Tree Design (Design v6) has numerous exciting options that increase the usefulness of the tool for schools, homeowners, consultants, landscape architects, tree advocates, and others. Updates and enhancements have been incorporated so that Design now:

- forecasts cumulative benefits and values of individual or groups of trees over a specified time period
- estimates the benefit and value each tree has provided since planting
- generates an exportable [summary report](#) which can be saved and shared with others
- considers the effects of the amount of sunlight received by a tree and the relative position of other nearby trees
- estimates tree-related energy effects for multiple defined structures
- displays dynamic visualization of simulated tree canopy growth over time
- incorporates updated benefit estimates for air quality improvement and carbon dioxide reduction savings based on the latest science.

The previous version of Design (Design v5) will be accessible through June 2014 to accommodate projects and educational programs in progress. You can also open an existing Design v5 project (*.design) in Design v6, and it will be updated with new estimates and saved as an updated v6 (*.dsgnprj) project.

i-Tree Canopy

i-Tree Canopy has become one of the most popular i-Tree Tools, used in many countries around the world for producing quick and statistically valid estimates of canopy cover. In addition, to cover type estimates, i-Tree Canopy will now estimate the following ecosystem

services and their monetary values:

- Annual pollution removal
- Annual carbon sequestration
- Total carbon storage



i-Tree Canopy ecosystem services estimates and values are based on local benefit values within the United States, along with the estimated tree canopy cover area for an area of interest. International Canopy users are limited to selecting a comparable U. S. location and selecting their local currency.

i-Tree Hydro

Hydro offers several new features that extend the use of Hydro beyond the watershed to the city scale. Here are some new Hydro highlights:

- Users can now select a U. S. city and simulate water flow and water quality changes qualitatively by modeling tree and impervious cover changes.
- Topographic indexes for U. S. cities, counties, states, and watersheds are now available, which eliminates the need for GIS skills to produce and import a digital elevation model.
- A new [Hydro executive summary report](#) provides a quick snapshot of model simulation results.
- Enhanced graphics flexibilities and a Digital Elevation Model (DEM) visualization option support model simulation results.
- Hourly United States weather data is now available for 2005 - 2012.

A user-friendly dynamic help panel explains terminology and guides users through the entire modeling process.

i-Tree Video Learning

Explore the Video Learning Page which features videos, screencasts, and archived webinars on i-Tree applications. Recent additions include a three-part video series providing steps to format and import an existing tree inventory into i-Tree Streets. [Visit the Video Learning Page>](#)

Abnormally Dry in MA? Really?

January 30, 2014—Believe it or not, we are currently experiencing dry conditions in much of Massachusetts, according to the [U.S. Drought Monitor](#). Several counties in Massachusetts are classified as “abnormally dry.” (Just last week, we even had some areas of “moderate drought.”) Keep an eye on drought conditions, nationwide and state-by-state at <http://droughtmonitor.unl.edu/>.

Growing on Trees

Read This: The Intelligent Plant

In this fascinating article in *The New Yorker* (December 23 & 30, 2013), Michael Pollan explores the controversial field of plant intelligence. Part of the controversy is what to call this field - “plant intelligence,” “plant neurobiology,” “plant signaling,” or the like - since the language we use to talk about “plant behavior” comes from the world of animals. For some scientists, Pollan notes, talking about plant intelligence, behavior, knowing, or learning is unsettling. These are all terms we use for people and animals, but how do we talk about plants? How do plants “know” when to turn a root that is about to hit the side of a container? How do they “know” when to produce a mast of seeds? Is that a kind of intelligence?

Pollan tackles these questions and more as he details studies on the sensory abilities of plants, going back to Charles Darwin who conducted many experiments on plants and determined that plants could sense many stimuli such as light, moisture, and gravity.

Read about this captivating field and increase your sense of wonder of plants. Read the article in [The New Yorker](#).

Pollan, M. 2013. December 23 & 30. “The Intelligent Plant.” *The New Yorker*. http://www.newyorker.com/reporting/2013/12/23/131223fa_fact_pollan.

Listen to Michael Pollan talk about the article on the PRI radio show Science Friday: <http://www.sciencefriday.com/segment/01/03/2014/can-plants-think.html>

Urban Trees Meet Urban Wildlife

New Haven, CT (January 6, 2014) – As the world becomes more urbanized, an article by Richard Conniff describes the need for considering urban tree canopies for their ability to provide urban habitat and support biodiversity. He sees the start of “an urban wildlife movement,” with urban trees playing a big role.

According to Conniff’s report, there is both a dramatic increase in urbanized areas and a corresponding loss of wildlife. The portion of the planet characterized as urban is on track to triple from 2000 to 2030, while 17% of the 800 or so North American bird species are in decline. This means that it’s not enough for cities to “plant a million trees, preach the gospel of backyard gardens, or build green roofs and smart streets. The trees, shrubs, and flowers in that ostensibly green infrastructure also need to benefit birds, butterflies, and other animals. They need to provide habitat for breeding, shelter, and food.”

Conniff describes initiatives focused on urban biodiversity, including U.S. Forest Service research, as well as University of Virginia researchers initiation of a Biophilic Cities Network devoted to integrating the natural world into urban life. In addition, Baltimore County, MD, officials now stipulate that canopy trees, rather than specimen or ornamental trees, must make up 80% of any planting on county land, and half of those need to be oaks, since research has shown that oaks benefit everything from caterpillars to songbirds.

Scientists are assessing not only which trees characterize a neighborhood, but how good they are as bird habitat. At the National Center for Ecological Analysis and Synthesis, researchers are developing a unified database, with species lists, abundance, and, in some cases, habitat types for urban wildlife in 156 global cities so far.

A new study in the journal *Landscape and Urban Planning* also looks at better ways of understanding urban wildlife and habitat in combination and proposes a marriage of the U.S. Forest Service’s i-Tree software and eBird, two current methods for keeping track of the natural world. The combination of the two enables researchers to assess not only which trees characterize a neighborhood, but how good they are as bird habitat, and which birds are using them.

[Get the full report from Richard Conniff.](#)

Source: “[Urban Nature: How to Foster Biodiversity in World’s Cities](#),” Yale 360

Growing on Trees

Enter to Win a Community Orchard

**Deadline for application submissions:
February 14, 2014**



The Connecting for Change Conference presented by the Marion Institute is giving away an orchard in the spring of 2014 to a worthy applicant. This giveaway is sponsored by [RainforestMaker](#), an organization committed to raising awareness, encouraging people to live more in balance with nature, and inspiring them and the companies they work for to replant the trees they have used.

The application process is open to any group, community, or organization that fits the following criteria:

- **The proposed land that the trees will be planted on is located in the Greater Boston area or Southeastern MA.**
- **A five-year maintenance commitment is made by an individual, community, or organization.**
- **The group, community, or organization has the willingness and ability to host a public tree planting day with tree maintenance workshop.**

Submissions will be judged by representatives from the Marion Institute, RainforestMaker, and a local orchard. The orchard will be awarded to the applicant that shows the greatest ability to maintain the health and longevity of the orchard, as well as serve as an asset to the community. We look forward to your submissions.

If you have any other questions please visit the [FAQ's](#) page.

See more at: <http://www.marioninstitute.org/connecting-change-orchard-giveaway-sponsored-rainforestmaker#sthash.19wjxiP.dpuf>

The 2014 UMass Extension Green Directory is now available!

The 2014 UMass Extension *Green Directory* is a comprehensive guide to educational resources for beginning and established agriculture and green industry professionals in Massachusetts. This FREE 44-page guide can be used as a reference all year long!

Go to <http://ag.umass.edu/agriculture-resources/green-directory>

The directory includes:

- Contact information for UMass Extension Agriculture and Landscape Specialists and Faculty
- Upcoming UMass Extension conferences, seminars, and workshops
- UMass Plant Diagnostic Lab sample submission information for insect, tick, disease, weed and cultural problems
- UMass Soil and Tissue Testing Lab information
- Pesticide license information, including test dates, training workshops, and how to get a pesticide license
- Phone resources for referring home gardener questions
- Extension newsletters, web sites, and publications
- Frequently used phone numbers related to Agriculture and the Green Industries.

Available online at

<http://ag.umass.edu/agriculture-resources/green-directory>

For a hard copy, call UMass Extension at (413) 545-0895, fax request to (413) 577-1620, or email eweeks@umext.umass.edu with your mailing address.

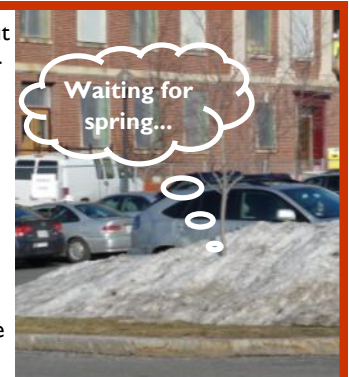
While you wait for spring, check out some of the educational opportunities in Massachusetts:

February

New England Grows
Ecological Landscaping Assoc.
Conference and Eco-Marketplace

March

UMass Community Tree
Conference
MA Land Conservation Conference
And more—see **page 10**



Growing on Trees From Mount Auburn Cemetery

*Funding for these programs has been provided in part by the
Massachusetts Cultural Council.*

Discover Mount Auburn: A Walking Tour

When: February 1, 2014, 1:00 p.m. – 2:30 p.m.

Where: Mount Auburn Cemetery

580 Mount Auburn Street, Cambridge, MA 02138

Cost: \$5-\$10

Mount Auburn, designated a National Historic Landmark, is one of the country's most significant designed landscapes. Here the arts of horticulture, architecture, and sculpture combine with the beauty of nature to create a place of comfort and inspiration. This 1.5-mile walking tour will focus on stories of history, monuments, and the lives of those buried here.

The program also runs March 1.

For more information view the Calendar at <http://mountauburn.org>

Tree & Shrub Pruning Workshop

March 12, 2014, 10:00 a.m. – 11:30 a.m.

Where: Mount Auburn Cemetery

580 Mount Auburn Street, Cambridge, MA 02138

Cost: \$10-\$15

Join Gardening Supervisor **Darryl Sullivan** and Arboriculture Supervisor **Jonathan Webb** for this walk and hands-on demonstration to learn about pruning ornamental trees and shrubs. We will discuss pruning methods and tools and look at examples. Bring your questions and hand pruners.

Space is limited; preregistration is required.

More information: <http://mountauburn.org/2013/tree-shrub-pruning-workshop-2/>

Winter Tree & Shrub Identification (And Signs of Spring)

When: March 20, 2014, 3:00 p.m. – 4:30 p.m.

Where: Mount Auburn Cemetery

580 Mount Auburn Street, Cambridge, MA 02138

Cost: \$7-\$12

Join President **Dave Barnett** as the snow-covered ground gives way to the earliest spring flowers and buds. We will observe the early signs of spring's arrival and learn how to identify some of the most interesting trees and shrubs at Mount Auburn by their buds, twig, and bark characteristics.

<http://mountauburn.org/2013/winter-tree-shrub-identification-and-signs-of-spring/>

Brown Bag Lunch Series: Wildlife Management at Mount Auburn, Past and Present

When: March 27, 2014, 12:00 p.m. – 1:00 p.m.

Where: Mount Auburn Cemetery

580 Mount Auburn Street, Cambridge, MA 02138

Cost: Free

Did you know that as early as 1870, the trustees of Mount Auburn were discussing which trees were best for attracting birds? Curator of Historical Collections **Meg L. Winslow** will open the program with highlights from the archives, including the early efforts of Mount Auburn's staff to create a "bird sanctuary." Horticultural Curator **Dennis Collins** will bring us to the present with examples of current planting projects and partnerships, and of how Mount Auburn is helping to build wildlife habitat in this urban oasis.

*This program is part of our Brown Bag Lunch Series: An Urban Wildlife Oasis. Join us for this **free** series of lunch-time talks to learn about the year-round and seasonal wildlife species you can find in the Cemetery and what we are doing to protect this important habitat and encourage biodiversity. All talks will take place in **Story Chapel**. Bring your lunch for these hour-long presentations; coffee and tea will be provided.*

From the Wood Education Resource Center Urban Wood Utilization Webcast

April 15, 2014, 10:00 a.m. to 12:00 p.m. EST

Join us to learn about urban wood utilization activities, including urban timber measurement protocols. To join the Webcast, click on this [Web link](#). For the audio portion, call toll-free at **(888) 844-9904** and use participant passcode **7578516**. View past Webcasts [here](#). For additional information, contact [Ed Cesa](#) at 304-285-1530.



News

Oldest Trees are Growing Faster, Storing More Carbon as They Age, Study Reports

January 15, 2014—In a letter published today in the journal *Nature*, an international research group reports that 97 percent of 403 tropical and temperate species grow more quickly the older they get. The researchers reviewed records from studies on six continents. Their conclusions are based on repeated measurements of 673,046 individual [trees](#), some going back more than 80 years. This study would not have been possible, Harmon said, without long-term records of individual tree growth. "It was remarkable how we were able to examine this question on a global level, thanks to the sustained efforts of many programs and individuals." Extraordinary growth of some species, such as Australian mountain ash – also known as eucalyptus – (*Eucalyptus regnans*), and the coast redwood (*Sequoia sempervirens*) is not limited to a few species, the researchers said. "Rather, rapid growth in giant trees is the global norm and can exceed 600 kg (1,300 pounds) per year in the largest individuals," they wrote. Read the complete story at [Phys.org](#) or listen to the coverage at [NPR.org](#).

Clues to How Plants Evolved to Cope With Cold

December 22, 2013 — Researchers have found new clues to how plants evolved to withstand wintry weather. In a study to appear in the December 22 issue of the journal *Nature*, the team constructed an evolutionary tree of more than 32,000 species of flowering plants -- the largest time-scaled evolutionary tree to date. By combining their tree with freezing exposure records and leaf and stem data for thousands of species, the researchers were able to reconstruct how plants evolved to cope with cold as they spread across the globe. The results suggest that many plants acquired characteristics that helped them thrive in colder climates -- such as dying back to the roots in winter -- long before they first encountered freezing. Read the full story at [ScienceDaily](#).

ISA and TCIA Call on National Geographic to Remove "Big Bad Wood" from the Air

January 7, 2014- The International Society of Arboriculture (ISA) and The Tree Care Industry Association (TCIA) recently wrote a letter to the National Geographic Channel requesting the removal of their "Big Bad Wood" program, due to its "dangerous and unprofessional depiction of commercial tree care operations." ISA and TCIA express concern that "Big Bad Wood" glorifies unsafe, unprofessional conduct that would put lives at risk if used in the field. [Read the full Letter.](#)

Celebrating Deep Freeze, Insect Experts See a Chance to Kill Off Invasive Species

By Lisa W. Foderaro, *New York Times*, January 8, 2014
While some people were cursing a canceled flight or wishing they had donned an extra layer on Tuesday, when temperatures in the region took a deep dive, entomologists, foresters and naturalists were rooting for the mercury to drop even lower. That is because the extreme cold has the potential to beat back some of the invasive insects threatening treasured local tree and plant species. [...] The insects, whether introduced pests like the hemlock woolly adelgid or native ones like the southern pine beetle, have weakened forests from Cape May, New Jersey, to Litchfield County in Connecticut. They are uncannily adept at surviving the winter, but most have a breaking point. And this week, that point was high. "The lethal temperature for the woolly adelgid is minus 4 or 5 degrees Fahrenheit," said Richard S. Cowles, a scientist with the Connecticut Agricultural Experiment Station, a state research center. "I was cheering a couple of days ago because most of the adelgids will be dying from the temperatures we saw." Read the full article at [nytimes.com](#).

Cities Weigh Options, Costs of Fighting Ash Borer

By Todd Richmond, Associated Press, January 5, 2014
Madison, WI — A decade ago, foresters feared an invasive Chinese beetle would spell doom for American ash trees. But a counterpunch emerged in the form of a powerful pesticide that can not only save infested trees, but inoculate them against the emerald ash borer. Milwaukee has been using the chemical for four years without losing one tree to the bug, but the pesticide must be reapplied every few years, creating a quandary for cash-conscious city councils. Municipal officials on the edges of the ash borer's ever-expanding range face a choice: Cut down their ash trees and replace them with other species - a large one-time expense - or commit to spending lesser sums on pesticide treatments, perhaps for years. Their decisions can affect everything from property values to storm water retention.

"There's no reason for a landscape tree to die now if someone is willing to put some money into it," said Deb McCullough, a Michigan State University forest entomology professor who helped test the pesticide before it went on the market. "(But) some cities have a tough time allocating money from a municipal budget to protect trees, when they're trying to keep firemen and policemen on the job." Read the full article at [SeattlePI.com](#).

THE CITIZEN FORESTER

On the Horizon

- Feb 5-7** New England Grows, Boston, MA, www.newenglandgrows.org
- Feb 30** [Principles and Fundamentals of Weed Science \(A1\)](#), UMass Extension, Milford, MA www.umassgreeninfo.org
- Feb 23-28** Municipal Forestry Institute, Society of Municipal Arborists, Nebraska City, NE, www.urban-forestry.com
- Feb 26-27** 20th Annual Ecological Landscaping Association Conference and Eco-Marketplace
- Feb 27-Mar 1** COURSE FULL: Tree Risk Assessment Qualification Course, NEC-ISA, Petersham, MA <http://newenglandisa.org/>
- Mar 3-5** COURSE FULL: Tree Risk Assessment Qualification Course, NEC-ISA, Portland, ME <http://newenglandisa.org/>
- Mar 5** Massachusetts Environmental Education Society Annual Conference, Worcester, MA <http://massmees.wordpress.com/annual-conference/>
- Mar 11** UMass Community Tree Conference, Amherst, MA, www.umassgreeninfo.org
- Mar 14-16** Splicing Workshop, New England Chapter-ISA, Weare, NH, www.newenglandisa.org
- Mar 18** [State Regulations Pertaining to Invasive Plant Management \(A2\)](#), UMass Extension, Milford, MA, www.umassgreeninfo.org
- Mar 22-22** Tree Risk Assessment Qualification Course, NEC-ISA, Portsmouth, NH, www.newenglandisa.org
- Mar 22** Massachusetts Land Conservation Conference, Worcester, MA, www.massland.org/conference
- Mar 24-26** Tree Risk Assessment Qualification Course, NEC-ISA, South Burlington, VT www.newenglandisa.org
- Mar 25** MAA Safety Saves, Massachusetts Arborists Association, Wellesley, MA, www.massarbor.org
- Mar 25** MAA Dinner Meeting, Massachusetts Arborists Association, Framingham, MA, www.massarbor.org
- Mar 27-29** Tree Risk Assessment Qualification Course, NEC-ISA, Rockfall, CT, www.newenglandisa.org
- April 1** Deadline: Intent to Apply: Urban and Community Forestry Challenge Grants
- April 1** Tree Planting Professional Development Series, MTWFA, Sturbridge, MA www.masstreekeepers.org
- April 4** MCA Exam, Massachusetts Arborist Association, Wellesley, MA, www.massarbor.org
- April 5** Mass Forest Alliance, Annual Meeting, Sturbridge, MA <http://massforestalliance.org/>
- April 8** [The Invasive Plant Issue and Invasive Plant Identification \(A3\)](#), UMass Extension, Milford, MA,
- April 18** **Deadline: MA Arbor Day Poster Contest**
- April 23** [Scouting for Early-Season Landscape Pests and Problems](#), UMass Extension, UMass Amherst, www.umassgreeninfo.org
- Apr 24-25** [Designing for Success: Ecological Restoration in Times of Change](#), Amherst, MA
- May 1** **Deadline for Applications: Urban and Community Forestry Challenge Grants**
- May 30** New England Chapter-ISA Tree Climbing Championship, Burlington, VT www.newenglandisa.org

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Deval Patrick, Governor

Richard Sullivan, Secretary, Executive Office of Energy and Environmental Affairs

John P. Murray, Commissioner, Department of Conservation and Recreation

Peter Church, Director of Forest Stewardship, Department of Conservation and Recreation

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If you have a topic you'd like to see covered or want to submit an item to **The Citizen Forester** (article, photo, event listing, etc.), please contact [Mollie Freilicher](mailto:mollie.freilicher@state.ma.us) or click [here](#).

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